

46-130 Checking oil pressure of power steering pump

Data

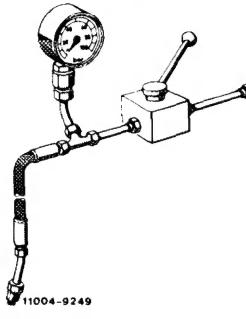
Max. speed of power steering pump	7000/min
Circulation pressure	max. 5 bar gauge pressure
Pressure relief valve opens at	65 ± 5 bar gauge pressure

Oil grades/filling capacity and oil level checkup

Automatic transmission fluid (ATF) or manual transmission oil	refer to specifications for service products page 236.2 refer to specifications for service products page 237
Filling capacity	approx. 1.4 litres
Oil level checkup	With the oil at operating temperature (approx. 80 °C) the oil level in supply tank should reach up to cast-in mark (approx. 20 mm below edge of tank). With the engine cold and at ambient temperature, oil level 6–8 mm below mark. For filling up, use perfectly clean oil only, since even the smallest particles of dirt may cause trouble in hydraulic system.

Tightening torque	Nm
Cap screw on HP expanding hose	45–50

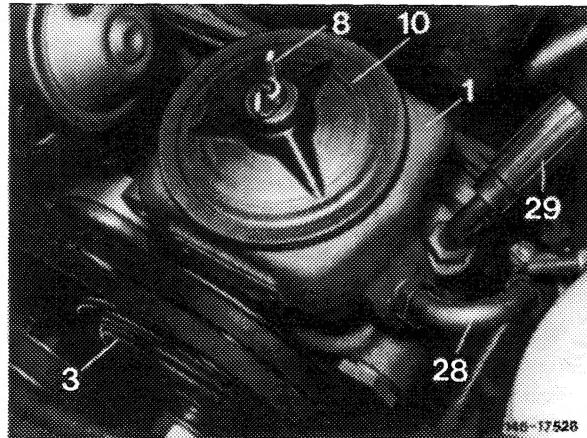
Special tool

Tester	 11004-9249	115 589 13 21 00
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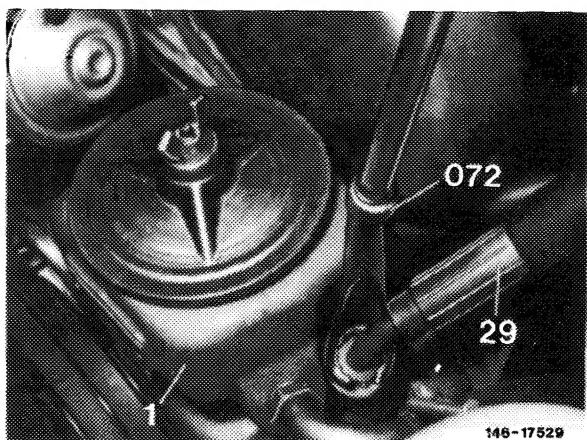
Conventional tool	
Open double-box wrench 17 x 19	e.g. made by Hazet, D-5630 Remscheid order no. 612

Checkup

- 1 Remove closing cover and draw off oil with a syringe, since otherwise the oil will run out when unscrewing HP expanding hose.



2 Unscrew high-pressure expanding hose (29) on power steering pump by means of open box-end wrench (072).



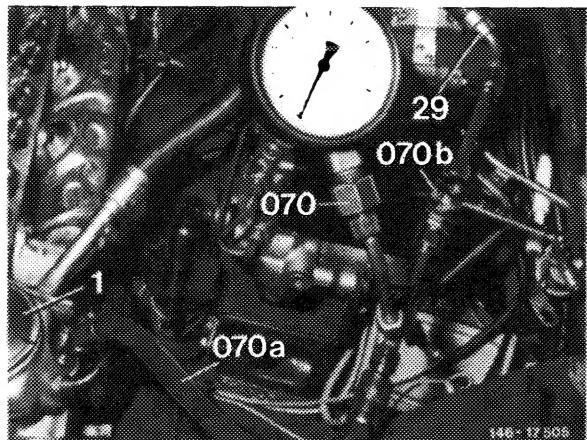
3 Connect high-pressure expanding hose (070a) of tester, as well as high-pressure expanding hose (29), to tester (070), fill supply tank with specified oil.

4 Run engine at idle speed and complete the following measurements:

a) with throttle valve open, measure circulation pressure, which should not exceed 5 bar gauge pressure (5 atü). Do not move steering wheel when measuring, since this would activate the control valve and the pressure would increase.

b) Connect **throttle valve to tester and measure max. pressure** of power steering pump, while accelerating engine to maintain a speed of approx. 1000/min.

The max. pressure can also be measured by turning the steering wheel to lefthand and righthand lock. **Caution, do not spend too much time for measuring,** since this would cause the oil temperature to rise to non-permissible limit, which in turn would result in damage to power steering pump.



c) If the pump does not attain the specified pressure, check volume control valve and pressure relief valve and replace, if required.

5 Disconnect high-pressure expanding hose on tester, remove tester, connect high-pressure expanding hose to power steering pump. Tighten coupling nut to 45–50 Nm.

6 Fill supply tank up to mark with oil. Add oil with the engine running.

7 Check servo system for leaks.

